

## REMARKS

Reconsideration of the subject patent application is respectfully requested.

Claims 1-10 and 12-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Converse*, U.S. Patent Number 3,938,377, in view of *McCarthy*, U.S. Patent Number 6,712,045. Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Converse* and *McCarthy* in view of *Armstrong*, U.S. Patent Number 5,461,908. For at least the following reasons, applicants traverse these rejections.

The Examiner cites the *Converse* reference for teaching testing of stationary engines under various load conditions, and attempts to read the stationary vehicle limitation into applicants' claims. In particular, the Examiner interprets applicants' claim term "low engine load", ostensibly in view of applicants' specification, as requiring the vehicle to be stationary. However, as stated in applicants' previous response, none of applicants' claims require the vehicle carrying the engine to be stationary, and it is impermissible to read such limitations into applicants' claims. Even if it was permissible to do so, which it is clearly not, the Examiner's interpretation of applicants' specification is wholly inconsistent with the language recited in applicants' specification. For example, at p. 11, lines 21-25, applicants' specification reads "[i]n one embodiment,  $VS_{TH}$  is set to zero to determine whether the vehicle is or is not moving. *Alternatively, the vehicle speed threshold,  $VS_{TH}$ , may be set to some other positive vehicle speed threshold value in cases where the vehicle speed may be allowed to move during leak testing of the fuel system* (emphasis added). Applicants' specification thus clearly discloses conducting leak testing of the fuel system when the vehicle is stationary or

when the vehicle is moving. Accordingly, applicants' claim term "low engine load" cannot be read to require the vehicle carrying the engine to be stationary.

Each of applicants' independent claims 1, 10 and 21 require, in some form, controlling fuel pressure within the fuel collection unit to a target fuel pressure near a maximum allowable fuel collection unit pressure level while maintaining low engine load, or, as in the case of claim 21, while maintaining engine load within a range of low engine loads. In contrast, none of the references of record, either alone or in combination, teach or suggest this feature.

*Converse* discloses a system for hot testing stationary automobile engines prior to installation in motor vehicles. The *Converse* system samples engine exhaust gas at various engine speed and load conditions, and then analyzes the sampled gases for their hydrocarbon (HC) and carbon monoxide (CO) levels. Nowhere does *Converse* describe, teach or suggest testing a high pressure fuel collection unit, or controlling fuel pressure within any such fuel collection unit.

*McCarthy* describes a fuel control system configured to estimate fuel leakage in the form of a spilled fuel amount, to then determine a quantity of fuel pumped based on the spilled fuel amount and an injected fuel amount, and then to control fuel rail pressure based on the quantity of fuel pumped. Nowhere does *McCarthy* mention controlling the fuel rail pressure to a *maximum allowable fuel rail pressure while maintaining low engine load*, as required by applicants' claims (emphasis added). The Examiner states in the Final Rejection that the *McCarthy* system "checks for leaks in various engine speed ranges and includes means for setting target speeds and target pressures . . . [h]igh pressures are used for higher loads and it would have been

obvious not to exceed the maximum pressure of the rail (216) since this would always result [in] system failure.” However, applicants’ claims do not recite high pressures used at higher loads. To the contrary, applicants’ claims require controlling the fuel rail pressure to a **maximum allowable fuel rail pressure while maintaining low engine load**, and this feature is neither taught nor suggested by McCarthy. In fact, McCarthy does not even modify the fuel rail pressure until after the fuel leakage test is conducted as stated in applicants’ previous response.

From the foregoing, it should be apparent that neither *Converse* nor *McCarthy*, nor the combination thereof, teach or suggest each of the limitations of applicants’ independent claims. Claims 2-9 ultimately depend from claim 1, claims 11-20 ultimately depend from claim 10, and claims 22-26 ultimately depend from claim 21, and these claims are believed to be patentably distinct from any one or combination of the references of record for at least the reasons stated hereinabove.

Applicants have traversed all claim rejections, and claims 1-26 are believed to be in condition for allowance. The Examiner is cordially invited to contact the undersigned by telephone to discuss any unresolved matters.

Respectfully submitted,



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